Simplify Rational Expressions

Simplify the rational expressions.

$$\frac{n^2 + 7n + 6}{n^2 - n - 42}$$

$$\frac{h^2 + 13h + 42}{h + 7}$$

$$\frac{s^2 - 4s - 45}{s^2 + 2s - 15}$$

$$\frac{g + 9}{g^2 + 16g + 63}$$

$$\frac{c^2 - 8c + 15}{c - 3}$$

$$\frac{8h^2 + 15h - 2}{4h^2 + 11h + 6}$$

$$\frac{3r^2 - 4r - 6}{5r^2 - 16r + 3}$$

$$\frac{10k^2 - 29k + 21}{2k^2 - 7k + 6}$$

Simplify Rational Expressions

Simplify the rational expressions.

$\dfrac{n^2 + 7n + 6}{n^2 - n - 42}$

$= \dfrac{n+1}{n-7}$

$\dfrac{s^2 - 4s - 45}{s^2 + 2s - 15}$

$= \dfrac{s-9}{s-3}$

$\dfrac{c^2 - 8c + 15}{c - 3}$

$= c - 5$

$\dfrac{3r^2 - 4r - 6}{5r^2 - 16r + 3}$

$= \dfrac{r+1}{5r-1}$

$\dfrac{h^2 + 13h + 42}{h + 7}$

$= h + 6$

$\dfrac{g + 9}{g^2 + 16g + 63}$

$= \dfrac{1}{g + 7}$

$\dfrac{8h^2 + 15h - 2}{4h^2 + 11h + 6}$

$= \dfrac{8h - 1}{4h + 3}$

$\dfrac{10k^2 - 29k + 21}{2k^2 - 7k + 6}$

$= \dfrac{5k - 7}{k - 2}$